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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/383,876	08/26/1999	CHRISTOPHER H. RAEDER	AMDA.316PA	7139
40581	7590	08/10/2005		
CRAWFORD MAUNU PLLC 1270 NORTHLAND DRIVE, SUITE 390 ST. PAUL, MN 55120			EXAMINER NGUYEN, DUNG V	
			ART UNIT 3723	PAPER NUMBER

DATE MAILED: 08/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

SP

Office Action Summary	Application No.	Applicant(s)	
	09/383,876	RAEDER, CHRISTOPHER H.	
	Examiner	Art Unit	
	Dung V. Nguyen	3723	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 November 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 and 14-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 and 14-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

2. The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 1-12 and 17-19 are rejected under 35 U.S.C. 102(e) as being anticipated by Yang (USPN 6,113,462). Yang inherently discloses a method for chemical mechanical polishing a wafer 6 using a CMP apparatus having a polishing table 4 including a polishing pad 2 and a wafer carrier 10 adapted to carry a wafer 6 relative to the center of the polishing table 4 comprising using the polishing pad 2, polishing the wafer 6 at a position relative to the center, determining that the wafer 6 is being polished in a center-offset manner, and as a function of the wafer 6 being polished in the center-offset manner (note Fig. 2, col. 4, lines 32-45), conditioning the pad 2, wherein the center-offset manner includes edge fast (center-slow manner)(note col. 4, lines 64-67),

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further including inspecting a wafer 6 during the polishing process including removing the wafer 6 from the carrier 10 and manually inspecting the wafer 6, arranging a conditioning wheel 16 over the pad 2 and relative to the center of the polishing pad 2, thinning the center and the edge of the pad 2. Yang also discloses an arrangement for chemical-mechanical polishing comprising a polishing pad 2 arranged to rotate, a wafer carrier 10 arranged to carry a wafer 6, rotate and hold the wafer 6 face-down on the polishing pad 2, a detection arrangement adapted to detect whether the wafer 6 is polishing in a center-offset manner (note col. 4, lines 60-64) and a conditioning device 16 adapted to condition the pad 2 (note Fig. 1-5, col. 4, line to col. 8, line 30).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yang (USPN 6,113,462) in view of Hu et al (USPN 6,227,947). Yang discloses the claimed invention as described above, however, Yang does not disclose a supply arranged to supply conditioning material to a polishing pad and the conditioning material is water. Hu et al disclose a supply 70 arranged to supply conditioning material to a polishing pad and the conditioning material is water (note Fig. 5, col. 8, lines 29-56). It would have been obvious to one having ordinary skill in the art at the time the invention

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was made to modify the apparatus of Yang with a supply as disclosed by Hu et al in order to provide a cleaning solution to condition a pad.

Response to Arguments

6. Applicant's arguments filed 8 November 2004 have been fully considered but they are not persuasive. In response to applicant's argument that the Office Action has asserted an improper inherency type argument in making the rejection, Yang '462 discloses the claimed apparatus, therefore, Yang '462 inherently discloses the process claims because MEPE 2112.02 states that prior art device anticipates a claimed process if the device carries out the process during normal operation. In response to applicant's argument that the Office Action fails to cite teaching or suggestion of various limitations including conditioning pad and positioning a wafer carrier misaligned with a pad as a function of a wafer polished in a center-offset condition, the current Office Action clearly points out the claimed limitations by figure number and sections in the specification.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

8. A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dung V. Nguyen whose telephone number is 571-272-4490. The examiner can normally be reached on M-F, 7:00-3:30.

10. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph J. Hail can be reached on 571-272-4485. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

11. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



DUNG VAN NGUYEN
PRIMARY EXAMINER

DVN
August 5, 2005